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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,425	03/29/2001	Sei-Yu Chen	DEX-0203	2890

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EXAMINER
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YU, MISOOK

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 09/08/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/820,425

Applicant(s)

CHEN ET AL.

Examiner

MISOOK YU, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 10-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Seq. alignment*.

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election with traverse of group 12, claims 1-6, and 9, directed to SEQ ID NO:12 in Paper No. 15 is acknowledged. The traversal is on the ground(s) that (1) the protein sequence encoded by the elected nucleotide sequence should be examined together because this would not put burden on the examiner, and (2) the restriction between the different SEQ ID NOs is improper based on MPEP 803 which says up to 10 nucleotide sequences would be examined. This is not found persuasive because a protein and a nucleotide sequence encoding the protein are different invention since they are classified in different class and subclass in the US classification system, and searching the protein sequence in the protein data would not give any information about nucleotide or vice versa, searching the two different sequences would put serious burden on the examiner. As regard to search of up to 10 sequences issue, MPEP 803.04 says "Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normal constitute independent and, distinct inventions within the meaning of 35 U.S. C. 121." Close examination of the instant specification suggests that SEQ ID NOs 1-12 do not appear to encode a single proteins but they appear to be different ESTs to be expressed in certain tissues.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-25 are pending and claims 7, 8, and 10-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention,

there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 15. Claims 1-6, and 9 are examined on merits to the extent as they are drawn to SEQ ID NO:12.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: the date of provisional application 60/192,921 is incorrect.

***Claim Objections***

Claims 1-6, and 9 objected to because of the following informalities: the claims have not been amended to reflect the election. They are still drawn to multiple inventions. Appropriate correction is required. For this Office action, the claims are examined to the extent as they are drawn to SEQ ID NO:12. However, this treatment does not relieve applicant the burden of responding to this objection.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6, and 9 are confusing because the claims recite either “a protein” or “LSG”. It is not clear what the metes and bounds are for the limitations. There are at

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least 6 possible polypeptides encoded by SEQ ID NO:12, and it's not clear which polypeptide is the claims referring to. It is also possible that SEQ ID NO:12 does not encode any protein but it could be only 3' untranslated region or pseudo gene.

Claim 1 recites the limitation "the same protein" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-6, and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are interpreted as drawn to SEQ ID NO:12 encoding a LSG protein. The specification at pages 59-62 says that SEQ ID NO:12 is a cDNA sequence corresponding to mRNA sequence differentially expressed in lung cancer. However, the specification does not teach where the start codon and stop codon are in SEQ ID NO:12. The specification does not teach what is the protein sequence encoded by SEQ ID NO:12. The specification does not describe any protein sequence. There are at least 6 possible translated products encoded by SEQ ID NO:12. It is also possible that SEQ ID NO:12 would not encode any protein if the sequence is a 3' untranslated region of a gene or a pseudo gene sequence. In summary, the specification does not describe the chemical structure of the protein encoded by SEQ ID NO:12, failing to meet the written description requirement.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by either US Pat. 5,559,026 (Sept. 24, 1996) or US Pat. 5,858,787 (Jan. 12, 1999).

The claims are interpreted as drawn to fragments of SEQ ID NO:12 per se based on disclosure of the specification as a whole. Either one of the patents teaches a nucleotide sequence comprising at least 15 contiguous nucleotides of instant SEQ ID NO:12. Note the attached sequence alignments. The intended use of the claimed product in claim 9 has not been given patentable weight. The Office interprets instant claims 3-6, drawn to expression vectors and method of producing some unknown protein(s) read on the protein of the prior art (see the abstracts of the patents, for example) because the specification does not teach the structure of the protein encoded by instant SEQ ID NO:12.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 703-308-2454. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony C Caputa can be reached on 703-308-3995. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Misook Yu  
August 30, 2003

*Mary E. Mosher*  
**MARY E. MOSHER**  
**PRIMARY EXAMINER**  
**GROUP 1800760)**